

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

March 23, 2012

CONTRACT NO.: DB00065

WBS ELEMENTS: 17BP.2.R.6, 17BP.2.R.7

COUNTY: Craven

ROUTES: SR 1003, SR 1433

DESCRIPTION: Bridge to Pipe Replacement Projects

ADDENDUM NUMBER 2

TO: Prospective Bidders

Please note the following revisions to the contract proposal for the above-referenced project.

- Replace Pages 32-33 of the original document with the revised versions, allowing the use of either #5 or #57 stone.
- Replace the Bid Form with the attached version. The item order given in the previous revision was incorrect.

The Revised Bid Form #2 must be used for the submitted bid to be valid. Using the original Bid Form will cause your bid to be rejected. The remainder of the proposal document is unaffected. If you should have any questions concerning this addendum, please call me at (252) 695-2044.

Sincerely,

Aaron Bullard, PE

Division Contract Officer

Attachments

cc: Mr. Ed Eatmon, PE

Mr. Johnny Metcalfe, PE Ms. Maria Rogerson, PE

Mr. John Hughes

Design of the aluminum structural plated pipe arch shall be the responsibility of the Contractor and shall comply with the latest AASHTO design specifications and requirements. The Contractor shall submit, fourteen (14) days prior to commencing work at each site, two sets of detailed plans and design calculations that have been checked and sealed by a North Carolina Registered Professional Engineer. The plans should be submitted to the Division Bridge Program Manager.

Payment will be made under:

Pay ItemPay UnitAluminum Structural Plated Pipe Arch – 12'-3" x 7'-3" with HeadwallsEach

GENERAL ALUMINUM STRUCTURE REQUIREMENTS:

All items are incidental to Aluminum Box Culvert and Aluminum Structural Plated Pipe Arch (ASPPA):

- All materials shall meet the requirements of the 2012 Standard Specifications.
- Pipe material shall be made of aluminum alloy and in dimensions per the standard specifications and hydraulic recommendations.
- Poor quality of workmanship of any materials supplied will constitute grounds for the structure being rejected.
- Manufacturer's representative, with at least two (2) years of experience in the installation of the type of structure, is required to provide technical assistance with the assembly of structure and headwalls as well as being on site during the installation and backfilling of pipe with headwalls through completion.
- Detailed shop drawings and design calculations shall be submitted for acceptance. The supplier shall provide a design that meets the requirements of AASHTO and is sealed by a NC registered Professional Engineer.
- Headwall locations shall be at or beyond the shoulder point.
- Headwalls will be required on the inlet and outlet of all pipes.
- All headwalls shall be parallel to the roadway.
- Pipe invert elevations shall be 1' below streambed.
- Headwall foundation shall be undercut and backfilled with either #5 or #57 stone 1' below bottom of headwall elevation.
- Wing walls shall be required if ditches are adjacent to the structure.
- Pipe is to be fully welded inside and out to headwalls using two root welds and two finish welds on either side of the wall. All finish welds are to be ground to a smooth finish.
- Headwall and pipe are to be reinforced per AASHTO specifications and structural engineer's requirements.

- All hardware including nuts, bolts, washers, rods, etc. shall be hot dipped galvanized.
- A 2' wide band and a continuous 3/8" thick x 2' wide flat gasket made of closed cell neoprene rubber which upon assembly provides a watertight seal at each joint will be required.
- All holes or tears in the pipe must be repaired prior to backfilling.
- Pipe bed will be undercut and backfilled with either #5 or #57 stone 1' below pipe invert elevations. Work for pipe bed undercut and either #5 or #57 Stone will be incidental to the pipe installation.
- Prepare the pipe foundation in accordance with the applicable method as shown in the contract documents, true to line and grade and uniformly firm. Where the material is found to be of poor supporting, value, or rock and when the Engineer cannot make adjustment in the locations of the pipe, undercut existing foundation material within the limits of the plans. Backfill the undercut with the specified material of either #5 or #57 stone. Encapsulate the either #5 or #57 stone with foundation conditioning geotextile before placing bedding material. Overlap all transvers and longitudinal joints in the geotextile at least 18". Maintain the pipe foundation in dry condition.
- Any undercut beyond the 1' specified, that is out of the Contractor's control and directed by the Engineer, will be paid for as Undercut Excavation by the CY which will include the fabric and backfill material of either #5 or #57 stone.
- Backfill material shall be either #5 or #57 stone from 1' below streambed elevation to top of pipe/box culvert.
- Backfill material shall extend a minimum of 3' from the O.D. of the pipe in both directions.
- ABC stone will be placed from top of pipe/box culvert to top of subgrade.
- Supplier to include all necessary wale beams, headwall cap, continuous flat gaskets and galvanized steel tieback rods with dma plates and adjustable hot dip galvanized turnbuckles.
- Pipe sections and bands shall be assembled and alphanumerically / alignment match-marked at the plant site before shipping to verify fit.
- Bands shall be installed onto the pipe sections prior to shipping.
- Pipe manufacturer must provide certification of the measured dimensions of the pipe, bands and the continuous flat gaskets. Certification must state that the bands and the gaskets have been pre-fitted and will securely tighten around the supplied pipe. Certification of the dimensions must be signed by the manufacturer's representative and dated.

| EXAMPLE: Supplied pipe me | sures inches in diameter | . Supplied bands and the continuous |
|----------------------------------|--------------------------------|-------------------------------------|
| flat gaskets measure incl | es in length and will securely | fasten pipe sections, without field |
| modification. | | |
| Signature: | | Date: |

NCDOT APPROVED PIPE AND HEADWALL VENDORS:

Contech Construction Products, Inc. Rahn Sutton

Phone: 919-889-0878

North Carolina Department of Transportation BID FORM (REV. 2)

CONTRACT: DB00065

WBS ELEMENTS: 17BP.2.R.6, 17BP.2.R.7

COUNTY: Craven

ROUTES: SR 1003, SR 1433

DESCRIPTION: Bridge to Pipe Replacement Projects

BID OPENING: March 28, 2012

| LINE # | ITEM NUMBER | SECT | DESCRIPTION | QTY | UNIT | UNIT PRICE | AMOUNT BID |
|-----------|------------------------------|------|--|-----------------|------|---------------|---------------|
| | | 800 | MODIL 17 ATION | 1 | LS | TRICE | DID |
| 2 | 0000100000-N 0063000000-N | SP | MOBILIZATION CRADING FOR RRIDGE NO. 10 SITE | 1 | LS | | |
| 3 | | SP | GRADING FOR BRIDGE NO. 19 SITE | 1 | LS | | |
| | 0063000000-N | | GRADING FOR BRIDGE NO. 208 SITE | | | | |
| 4 | 0234000000-Е | SP | UNDERCUT EXCAVATION | 60 | CY | | |
| 5 | 0992000000-Е | SP | ALUMINUM BOX CULVERT – 33'-9" X 9'-1" WITH HEADWALLS | 1 | EA | | |
| 6 | 0992000000-Е | SP | ALUMINUM STRUCTURAL PLATED PIPE ARCH - 12'-3" X 7'-3" WITH HEADWALLS | 1 | EA | | |
| 7 | 1121000000-Е | 520 | AGGREGATE BASE COURSE | 600 | TON | | |
| 8 | 1489000000-Е | 610 | ASPHALT CONC BASE COURSE, TYPE B25.0B | 120 | TON | | |
| 9 | 1498000000-Е | 610 | ASPHALT CONC INTERMEDIATE COURSE, TYPE 119.0B | 100 | TON | | |
| 10 | 1519000000-Е | 610 | ASPHALT CONC SURFACE COURSE, TYPE S9.5B | 60 | TON | | |
| 11 | 1575000000-Е | 620 | ASPHALT BINDER FOR PLANT MIX | 20 | TON | | |
| 12 | 3656000000-Е | 876 | GEOTEXTILE FOR DRAINAGE | 470 | SY | | |
| 13 | 5325600000-Е | 1510 | 6" WATER LINE | <mark>40</mark> | LF | | |
| 14 | 5540000000-Е | 1515 | 6" VALVE | 2 | EA | | |
| 15 | 5800000000-Е | 1530 | ABANDON 6" UTILITY PIPE | 464 | LF | | |
| 16 | 5871500000-E | 1550 | TRENCHLESS INSTALLATION OF 8" IN SOIL | 400 | LF | | |
| 17 | 6000000000-Е | 1605 | TEMPORARY SILT FENCE | 1,100 | LF | | |
| 18 | 6009000000-Е | 1610 | STONE FOR EROSION CONTROL, CLASS B | 60 | TON | | |
| 19 | 6012000000-Е | 1610 | SEDIMENT CONTROL STONE | 80 | TON | | |
| 20 | 6015000000-Е | 1615 | TEMPORARY MULCHING | 1 | ACR | | |
| 21 | 6018000000-Е | 1620 | SEED FOR TEMPORARY SEEDING | 50 | LB | | |
| 22 | 6021000000-Е | 1620 | FERTILIZER FOR TEMP. SEEDING | 0.25 | TON | | |
| 23 | 6029000000-Е | SP | SAFETY FENCE | 600 | LF | | |
| 24 | 6030000000-Е | 1630 | SILT EXCAVATION | 20 | CY | | |
| 25 | 6036000000-Е | 1631 | MATTING FOR EROSION CONTROL | 200 | SY | | |
| 26 | 6042000000-Е | 1632 | 1/4" HARDWARE CLOTH | 50 | LF | | |
| 27 | 6070000000-N | 1639 | SPECIAL STILLING BASIN | 2 | EA | | |
| 28 | 6071010000-Е | SP | WATTLE | 60 | LF | | |
| 29 | 6084000000-Е | 1660 | SEEDING AND MULCHING | 0.5 | ACR | | |

| 30 | 609000000-Е | 1661 | SEED FOR REPAIR SEEDING | 50 | LB | |
|-----------------|--------------|-------------------|---|------------------|-----------|--|
| 31 | 6093000000-Е | 1661 | FERTILIZER FOR REPAIR SEEDING | 0.25 | TON | |
| 32 | 6111000000-Е | SP | IMPERVIOUS DIKE | 175 | LF | |
| 33 | 6117000000-N | SP | RESPONSE FOR EROSION CONTROL | 6 | EA | |
| 34 | 8035000000-N | 402 | REMOVAL OF EXISTING STRUCTURE, BRIDGE NO. 19 | 1 | LS | |
| 35 | 8035000000-N | 402 | REMOVAL OF EXISTING STRUCTURE, BRIDGE NO. 208 | 1 | LS | |
| <mark>36</mark> | 5325800000-E | <mark>1510</mark> | 8" WATER LINE | <mark>400</mark> | LF | |

| TOTAL BID FOR PROJECT: | |
|------------------------|--|
|------------------------|--|

| CONTRACTOR | | |
|--|----------------------------|------------------------------------|
| ADDRESS | | |
| Federal Identification Number | Contractors Licens | se Number |
| Authorized Agent | Title | |
| Signature | | Date |
| Witness | Title | |
| Signature | | Date |
| THIS SECTION TO BE COMP | LETED BY NC DEPARTMEN | NT OF TRANSPORTATION |
| This bid has been reviewed in accor Roads and Structures 2012. | dance with Article 103-1 o | of the Standard Specifications for |
| Reviewed by NCDOT | Division Contract Officer | Date |
| Accepted by NCDOT | | Date |

Division Engineer